## Tree Survey Report FOR

## Rathangan

## CLIENT: Sophia Housing

## July 2023

D 02

Austen Associates
Renishaw House, Ballyguile Beg

Wicklow Town
Tel: 040466827
designdesk@austenassociates.ie www.austenassociates.ie

## Contents

1.0 Introduction ..... 3
2.0 Report limitations ..... 3
3.0 Existing Environment ..... 3
4.0 Arborical Impact Assessment ..... 6
5.0 Arborical Method Statement ..... 11
6.0 Conclusions ..... 16

### 1.0 Introduction

This tree survey was commissioned as part of the proposals for the construction of new apartments and the property's car park area at a former convent located in Rathangan on the border between County Kildare and Offaly. This survey identifies the trees, hedgerows, and general vegetation, provides a general assessment, recommendations for their management and protection.

The trees and hedgerows were surveyed on the 10/07/2023 by this practice and the findings have been summarised and recorded in the following report. All significant trees have been individually identified and numbers referenced in the survey table located at the end of the report. This report should be read in conjunction with the drawing No. 086623_TS01 (Tree survey plan) and Drawing No. 085623_TP01 (Tree retention and protection plan). Trees have been located from the topographical survey ` 4654 St Johns Convent Rathangan_ITM15_100_2D' as well as from an aerial view from google maps and measurements taken with a measuring tape on site.

### 2.0 Report limitations

The trees are subject to a basic visual inspection only. A visual inspection is from ground level only and it shall be borne in mind it is subject only to obvious external defects visible at the time of inspection. It does not include a climbing inspection, below ground, tomographical readings or internal investigations.

### 3.0 Existing Environment

The site is located to the east of the small town of Rathangan town centre on New Street. The land surrounding the site consists of retail and business to the west and south as you go closer to the town centre, and residential and agricultural land to the north and east.

The area in which the site is located, has a mixture of residential housing estates, small businesses, and retail premises.

The western boundary is shared with semi-detached housed, the southern boundary is defined by the road, and the east and north boundaries are made up of a combination of different types of walls, fencing and hedges.

This vegetation appraisal gives an overview of the types of vegetation found on the site. The Arboricultural Survey prepared by Austen Associates gives more specific detail on the Trees and vegetation within or bordering the site boundary. Refer to drawings 085623_TS 01, 085623_TP 01. Refer also to the Landscape Plan 085623_LP_01 for planting and landscape proposals.

## Vegetation within the site

The vegetation within the site consists of trees of varying sizes in grass lawn areas, along hedging in the site as well as the boundaries. The trees on site are made up of a variety of Beech and fruit trees.

The northern boundary is made up of a barbed wire fence interwoven with unkept vegetation of low quality, the western most part of the northern boundary is made up of a Cherry Laurel hedge which is in good condition, as well as a semi mature Lawson cypress, located outside of the red line boundary. In the corner of the interior wall on the north side of the site within an area of lawn there is a self-seeded Fagus sylvatica Beech tree in good condition.


Figure 1: Fagus sylvatica located near the north boundary.

Continuing south on the site there is a large area of grass lawns divided by a pathway diverging at different points. The trees here consist of Fagus Sylvatica Beech, Malus Apple, Prunus domestica Plum, Pyrus Pear, and Juglans nigra Walnut. This area of the site also has a line of box hedging along the path which runs along the edge of the lawn areas. The trees in this area can mostly be retained and incorporated into the new design of this area, however the trees which consist of apple trees on the western boundary of this lawn area will need to be removed due to the proposal of new car parking spaces where they are located. On the southern part of these lawn areas there is a hedge line containing Cotoneaster lacteus and privet which vary in height between 2-3 metres.

The southern boundary of the site contains a large open space next to the main existing building and its entrance. The open area is divided away from the tarmacadam of the entrance by a small retaining wall about 1 metre in height as the open space is at a higher elevation. The open area contains three trees: a Prunus cerasifera 'Nigra' Purple plum, and two Fagus sylvatica 'Atropurpurea Group' Copper Beech. The plum tree is in poor condition due to heavy lichen and moss on the bark and will need to be removed for the new design. The two beech trees, although having a few limbs which have been removed and a large amount of decay in them, they are still in very good condition and have grown to a height of between 20-22 metres. These two beech trees are to be retained.


Figure 2: Two beeches at the front of the site

### 4.0 Arborical Impact Assessment

| Number of trees and percentage categories |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Individual trees | Category A | Category B | Category C | Category U | Total |
| 20 no . | 3no. 15\% | 1no. 5\% | 16no. 80\% | Ono. 0\% |  |
| Retained trees | 3no. 15\% | Ono. 0\% | 7no. 35\% | Ono. 0\% | 10no. 50\% |
| Removed trees | Ono. 0\% | 1no. 5\% | 9no. 45\% | Ono. 0\% | 10no. 50\% |

This section of the report describes the impacts that the proposed development will have on the trees. To be read in conjuncture with the tree survey and tree protection drawings 085623_TS 01 and 085623_TP01. Refer to section 5 Arboricultural Method Statement below for details on the protective actions required.

## Individual Trees

All trees on site were surveyed as individual trees.
The trees which have all been surveyed individually (tree no.0744-0761) all reside in the lawns and open area within the planned development site. They mainly consist of Beech Fagus sylvatica and various fruit trees such as Malus apple, Prunus domestica Plum, Pyrus Pear, Prunus cerasifera 'Nigra' Purple plum, a Juglans nigra Walnut tree is also present. All the trees are considered category C except for the Beech trees which have been assigned either a category B or A.

Tree no. 0744 is a small self-seeded Beech Fagus sy/vatica.

Impact of the development: A building is proposed at the location of this tree, and it is to be removed.

Tree no. 0745 is a large veteran Beech Fagus sylvatica. This is an important tree from a cultural and ecological perspective. It has two smaller Ganoderma lucidum fungal brackets on the trunk. It is recommended that sonic tomography be used to get a better picture of any internal decay. There is a stone wall existing to the north within the RPA. It is expected that the tree roots do not project beyond this wall, allowing for development to the north
of the wall. A path is proposed in this area and no root protection measures are required in this area.

Impact of development: The site layout has been designed so that there is minimal impact on this tree. Existing pedestrian paths are to be retained in their original alignment. Within the RPA, the surface of these paths may be dressed by hand. There is to be no excavation and no machinery is to encroach within the tree protective fencing alignment/RPA. Follow up surveys every 3 years are recommended.


Figure 3: Beech tree 0745

Tree no.'s 0746 - 0758 are orchard trees, species are Apple Malus spp. Pear Pyrus spp. Plum Prunus domestica and Walnut Juglans nigra. They create a nice atmosphere in the current use as an enclosed garden. The Walnut Juglans nigra has significant basal rot, though would be expected to survive in its current land use. It would be a risk within the proposed development with increased public and residential users passing within falling distance of the tree, making it a potential hazard.

Impact of the development: The site layout has been designed to retain as many of these trees as possible. Car parking and access road layout will see the removal of tree no.'s 0753 - 0758. Tree numbers 0746 - 0752 will be retained.

4 no. smaller, relatively recently planted Apple Malus spp. trees are proposed for relocation within the site. These trees are small and have not been surveyed individually.

Tree no. s $A$ and $B$ are essentially part of a hedge that lines part of the existing pathways. These are low value trees.

Impact of the development: Car parking and access road layout will see the removal of these trees.


Figure 4: Roots of tree no. 0746 growing in existing path

Tree no. 0759 is semi-mature Purple Plum Prunus cerasifera 'Nigra' located in the front garden area of the existing site.

Impact of the development: proposed paving and front garden location will see the removal of this tree.

Tree no.'s 0760 \& 0761 are champion veteran Copper Beech trees, Fagus sylvatica 'Atropurpurea Group'. These trees play an important role in the biodiversity, green infrastructure and cultural heritage of the area. As they are located within the front garden of the existing site, and are visible from the public road and footpath, they contribute greatly to the public realm.

Impact of the development: The site layout has been designed to allow the retention of these trees. There is an existing garden wall 3-4 from the trunk of these trees. There is a c.400mm drop to a tarmacadamed driveway area. The theoretical RPA of these trees extends into the driveway area. However, in reality it is unlikely that the roots have grown beneath the wall and its foundations and on underneath the tarmacadamed driveway area. It is recommended that site investigation trenches be excavated to determine the presence of tree roots. This work must be supervised by the project arborist. Excavations are to start at the outer edge of the RPA and work gradually inwards until roots are encountered, or the wall is reached. Lighter machinery may travel across the existing tarmacadamed area within the RPA of the tree, provided that tree protective fencing is in place.


Figure 5: Copper Beech and level change in front garden

## Hedging

Hedgerow 01 is a low garden box hedge Buxus sempervirens, lining the garden path on both sides. It is a well-established hedge that adds a nice quality to the garden and is a reference point to its religious use.

Impact of the development: Parts of this hedge will be retained, and some parts will be removed.

Hedgerow 02 is a mature well established Cotoneaster lacteus and Privet Ligustrum ovalifoliium hedge, approximately 2-3 m in height.

Impact of the development: This hedge is close to the construction works area and will be impacted on by scaffolding locations, machinery and construction activities. It is a low value hedge and is to be removed as part of the development.

Hedgerow 03 is a mature well established Portuguese Laurel Prunus laurocerasus hedge, approximately $1-1.5 \mathrm{~m}$ in height.

Impact of the development: This hedge is located away from the construction works and it is expected that there will be no impact. It is to be retained and protected by tree protective fencing.

## Vegetation outside of the development that will be unaffected

Tree Line 01is a line of mature Poplar Populus tremula that is located across the road from the development. This will not be affected by the works.

A Lawson Cypress Chamaecyparis lawsoniana is located outside the boundary wall of the site and is outside of the redline boundary. It is expected that this will not be affected by the works.

A mixed native hedge primarily made up of Hawthorn Crataegus monogyna is located outside of the redline boundary and will not be affected by the works.

### 5.0 Arborical Method Statement

## Introduction:

This method statement contains information that will allow the building contractor set up the site for protection of trees. It will also help the contractor prepare a method statement detailing how they intend to protect retained trees.

The existing site contains a number of mature trees, they are generally of reasonable quality. Many of these trees are called up for removal and some for retention. Please refer to the drawing 085623_TP_01 and the Arboricultural Impact Assessment above for details. The principal standard for tree retention practices is BS 5837:2012.

## Tree rooting:

The majority of the tree's roots are in the top 1000 mm of the soil, with the majority of feeding and anchoring roots in the top strata. Typically, they spread laterally from the trunk out beyond the crown. The area of the tree roots is referred to as the Root Protection Area, RPA, and is indicated on the accompanying plans, 085623_TS_01 and 085623_TP_01. The RPA of the trees to be retained is not to be disturbed or impacted upon by construction. CRITICAL: UNDER NO CIRCUMSTANCES ARE LEVELS TO BE RAISED OR LOWERED IN THE ROOT PROTECTION AREA!

Removal of trees:

Trees are to be removed to the standard set out in BS 3998:2010. They are to be safely felled with stumps and roots to be removed. The trees proposed for removal are adjacent to trees proposed for retention. Care is to be taken so as to not damage the above ground parts, (bark, trunk, branches, shoots and leaves etc. of the retained trees). The roots of the retained trees are to be protected also. Note the rootzone that requires protection is indicated on the drawing 085623_TS_01.

Retention of trees:

- The root protection area of the trees has been worked out in line with the guidance given in BS 5837:2012. It is indicated on drawings 085623_TS_01 and 085623_

TP_01. This area is an estimate of the below ground root spread of the trees and protection of this area is of utmost importance.

- No alterations of ground levels are to occur within the RPA, this includes excavations or raising of ground levels.
- Any practices that would lead to compaction within the RPA such as storage of materials or location of site buildings are strictly prohibited.
- Any spillages, washings or any other possible contamination of the soil in the rootzone from construction operations is prohibited.
- Cellular confinement must be added to roots of trees which will be in danger of construction of the new road/car park. See detail on 085623_TP_01 for more information
- The above ground parts of the trees will be protected from damage from site traffic and machinery and from felling operations of adjacent trees.


## Construction method statement

The building contractor must prepare a construction method statement in relation to retaining trees on site.

- This method statement will detail how construction work and activities including but not limited to; waste management, site traffic management, location of services (both underground and overhead), will be planned so that there is little or no impact on the root protection areas and over-ground plant parts of the trees or protected vegetation.
- This will include outline drawings showing location site traffic routes, storage areas, welfare facilities, waste management areas etc. in relation to the locations of retained trees.
- It will outline the locations of and materials to be used in tree protective fencing. See below for tree protective fencing requirements.
- It will outline the induction process for all staff and sub-contractors in relation to tree protection.
- It will use this document as a minimum standard for tree protection. All tree protection measures mentioned herein shall be the construction method statement.
- It will show temporary ground protection measures for any machinery/vehicles that must enter the RPA of trees to carry out vital work. The temporary ground protection measures for machinery under 2 Tonnes will comprise of a 150 mm layer of coarse wood chippings placed over a geo-textile to spread the load. A weight bearing surface such as chip board will be placed on the wood chippings. For
machinery above 2 Tonnes a proprietary ground protection system will be used. This will be agreed with the project engineer and will accommodate the necessary loading. Any ingress into the RPA Must be agreed with the project arborist in writing prior to touching a tree protective fence.


## Tree work

- Any tree work undertaken on site will be in line with BS 3998. An assessment shall be taken for the presence of any protected wildlife prior to removal and any ecological survey recommendations will be observed.
- Scrub, including Briar will be removed from around the trees. The above ground parts of the trees are not to be damaged. There will be no excavation within the RPA. Specific roots of Briar etc. may be removed by hand digging.
- Some minor branch removal operations will have to be carried out to individual trees. This must be carried out by a trained professional with adequate experience.


## Tree protection areas

The alignment of the tree protective fencing will be as shown on Drawing No. 085623_TP_01 and is specifically designed to protect the tree roots. Construction traffic will be diverted between tree protection areas for the duration of construction and no heavy-duty traffic shall pass over the RPA of retained trees prior to erection of tree protective fencing. The fencing shall remain in place for the duration of the construction works and shall only be removed when all works are complete. The tree protective fencing alignments will not be altered, even on a temporary basis, without the written consent of the project arborist.

## Tree Protection

- No materials, site storage areas, cement washing points, construction waste disposal areas shall be located in or around the Root Protection Areas.
- No noxious liquids shall be disposed of or deposited within the RPA.
- Rubbish shall not be burned in the RPA
- The soil level shall not be altered in any way, (raised or lowered) within the RPA.
- No action that might cause compaction within the RPA are to be carried out, this includes but is not limited to: placement of site facilities, storage of machinery, storage of materials, topsoil storage, staff parking.
- No signage, staples, boards or any other item/material shall be attached to any retained tree.
- Site machinery with extending arms, buckets etc. shall not damage the above ground parts of the trees.


## Tree Protective fencing

protective fencing shall be as outlined on Drawing No. 085623_TP_01 and shall remain in place during the construction works. Any works within the tree protective fencing shall be supervised on site by the project Arboriculturist. Signage shall be attached to the fencing reading 'Tree Protective fencing KEEP OUT'

Reports on the successful completion of the works shall be issued by the project Arboriculturist on completion. Once the tree protective fencing is in place and has been approved by the project Arboriculturist, the contractor may commence site set up.

No materials, site storage areas, cement washing points, construction waste disposal areas shall be located in or around the Tree Protection Areas. No noxious liquids shall be disposed of or deposited within the TPA.

This fencing must be checked daily by the site foreman to ensure it is on the alignment shown in the drawings and is rigid with no breaches.

It must be in place for the entirety of the works programme, it is the last item to be removed off site on completion of works.

All tree felling, surgery and remedial works shall be completed prior to the completion of construction works on site.

All works on retained trees shall comply with proper arboricultural techniques conforming to BS 3998: 2010 Tree Work - Recommendations.

The clearance of any vegetation including trees and scrub should be carried out outside the bird-breeding season (1 March - 31 August inclusive) or as stipulated under the Wildlife Acts 1976 and 2000.

The Arborist shall carry out a post construction tree survey and assessment on the condition of the retained trees. A Completion Certificate shall be signed off by the Arborist
when all permitted development works are completed and in line with the recommendations of the tree reports and plans. The certificate shall be submitted to the Parks Section for written agreement upon completion of construction works on site. This needs to be priced for, if not already.

A Final Completion Certificate is to be signed off by the Arborist when all tree/hedgerow works are fully completed to the satisfaction of the Parks Section and in accordance with the permitted landscape proposals and all of the recommendations in the tree reports and plans. The certificate shall be submitted to the Parks Section for written agreement prior to taking in charge.

### 6.0 Conclusions

There are 3 no. outstanding trees on the site. The site has been designed to retain these trees. All retained trees must be protected during construction. It is recommended that a sonic tomography test be carried out on one of the large Beech trees, tree no. 0746. There are small fungal brackets on the trunk. The test will give a more accurate picture of any internal decay that may be present. The tree is to be surveyed every 3 years.

A number of the trees located in the site are to be removed for the purposes of development for the new buildings, access road and car park. These trees are considered low value, poor trees and their removal will be mitigated by planting of replacement trees or shrubs.

Trees to be retained will be protected by tree protective fencing will be erected to prohibit access to the rooting area of the trees. This tree protective fencing to BS 5837:2012 will be in place all through construction along with adherence by all on site with the instructions regarding the protection of the RPA. These steps are critical to the successful retention of trees.

It is recommended that a project arborist be appointed to oversee construction and tree protection.

Date 22/02/2024

Eunan O'Donnell (associate) BSa Ag, Dip Hort, MILI, Arb Cert, TechArborA
Senior Project Landscape Architect and Arborist
Email: eunan@austenassociates.ie

## List of Abbreviations Used in Schedule of Tree Data Below:

```
m = Metre
cm = Centimetre
CBH=Circumference at Breast Height
DBH= Diameter at Breast Height, taken at 1.5m according to BS 5837:2012
NA = Not Applicable
TS = Twin Stems
MS = Multi Stems
Ptag = Previously tagged by others
```


## Age Class:

$Y=$ Young: A tree which has been planted in the last 10 years or is less than $1 / 3$ expected height of the species in question
$\mathrm{Sm}=$ Semi-mature: A tree which is between $1 / 3$ and $2 / 3$ 's the expected height of the species in question
$M=$ Mature: $\quad A$ tree that has reached the expected height of the species in question, but is still increasing in size

Om =Over Mature: A tree at the end of its life cycle and the crown is starting to break up and decrease in size

V= Veteran: A tree showing signs of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

## Health Status:

L = low vigour
Md = Moderate vigour
$\mathrm{N}=$ Normal vigour

## Condition Class:

U=Those trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years
$A=$ Trees of high quality with an estimated remaining life expectancy of at least 40 years
$B=$ Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
$\mathrm{C}=$ Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm .

The above categories ( $\mathrm{A}, \mathrm{B}$ and C ) will be further subdivided with regard to the nature of their values or qualities. A tree may be awarded one or more value categories as below, but such attributes do note infer any additional value and it may be possible for a tree may qualify for one or more of the categories as below.

## Sub-categories:

## 1-mainly Arboricultural Values:

A = Typically, a good example of its species, especially if rare, or are an essential component of arboricultural features which is considered to make a substantial Arboricultural contribution
$B=$ Trees that might be included in category $A$ but are downgraded due to impaired condition.
$\mathrm{C}=$ Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories

## 2- mainly Landscape Values:

$A=$ Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
$B=$ Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality $\mathrm{C}=$ Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits

## 3-Cultural Values:

A = Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g., veteran trees or wood pasture)
$B=$ Trees with material conservation or other cultural value
$C=$ Trees with no material conservation or other cultural value

| No. | Species | Ht | N | S | E | W | $\begin{gathered} \text { Dia } \\ (\mathrm{DBH}) \end{gathered}$ | Vigour | Age Class | Cond Class | ERC | Comments | Priority <br> Action |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0744 | Beech Fagus sylvatica | 8-10m | 2.0 m | 2.2 m | 2.2 m | 2.3 m | 180mm | N | Y | B1 | 40+ | Self-seeded tree in good health, branching from base, located in corner close to walls | Remove |
| 0745 | Beech Fagus sylvatica | $\begin{aligned} & 20- \\ & 22 \mathrm{~m} \end{aligned}$ | 10m | 9.5 m | 11m | 11m | 1048m | N | V | A3 | 40+ | Ganoderma fungal brackets on south and east side of the trunk at 3 m , the brackets are c .10 cm in size, roots above ground in adjacent path, minor decay in smaller branches in crown, large branch removed and decay at branch attachment at 2.m above GL | Retain, carry out sonic tomography and review retention, survey every 3 years |
| 0746 | Apple Malus spp. | 8-10m | 3.5 m | 5.0 m | 4.0 m | 4.0m | 330 mm | Md | Om | C3 | 10+ | Branch removed, major decay at branch attachment, hollowing into trunk northeast side, lean to east, lower branches removed south side | Retain, light pruning |
| 0747 | Plum Prunus domestica | 8-10m | 2.0 m | 5.0m | 5.0m | 4.0m | $\begin{gathered} \text { M/S 140, } \\ 130 \\ 80 \mathrm{~mm} \end{gathered}$ | Md | Om | C3 | 10+ | Heavy lichen and moss on bark | Retain, light pruning |
| 0748 | Pear Pyrus spp. | 2-4m | 2.0 m | 2.0m | 2.0 m | 2.0m | 95mm | N | Sm | C1 | 20+ | Suckers at base, decay at base, heavy lichen and moss on bark | $\begin{gathered} \text { Retain, light } \\ \text { pruning } \end{gathered}$ |
| 0749 | Apple Malus spp. | 2-4m | 2.3 m | 2.5 m | 2.2 m | 2.0 m | 122 mm | N | Sm | C3 | 20+ | Poor pruning leading to decay pegs, heavy lichen and moss on bark | Retain, light pruning |


| No. | Species | Ht | N | S | E | W | $\begin{gathered} \text { Dia } \\ \text { (DBH) } \end{gathered}$ | Vigour | Age Class | Cond <br> Class | ERC | Comments | Priority Action |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0750 | Pear Pyrus spp. | 4-6m | 3.5 m | 4.5 m | 3.5 m | 4.0m | $\begin{aligned} & \text { M/S 220, } \\ & 130,120 \\ & \& 110 \mathrm{~mm} \end{aligned}$ | L | Om | C3 | 10+ | Suckers at base, decay at base, heavy lichen and moss on bark | Retain, light pruning |
| 0751 | Apple Malus spp. | 4-6m | 4.0m | 3.2 m | 4.0m | 3.5 m | $\begin{gathered} \text { M/S } \\ 200 \& \\ 110 \mathrm{~mm} \end{gathered}$ | L | Om | C3 | 10+ | Poor pruning leading to decay pegs, heavy lichen and moss on bark | Retain, <br> light pruning |
| 0752 | Apple Malus spp. | 2-4m | 2.0 m | 3.0 m | 2.2 m | 2.0m | 80mm | L | Om | C3 | 10+ | Heavy lichen and moss on bark | Retain, <br> light pruning |
| 0753 | Apple Malus spp. | 2-4m | 4.0m | 4.5 m | 3.5 m | 4.0m | $\begin{gathered} \text { M/S 230, } \\ 225 \& \\ 140 \mathrm{~mm} \end{gathered}$ | Md | Om | C3 | 10+ | Heavy lichen and moss on bark | Remove |
| 0754 | Apple Malus spp. | 2-4m | 2.0m | 2.2 m | 3.0m | 2.0m | $\begin{gathered} \text { M/S } \\ 150 \& \\ 80 \mathrm{~mm} \end{gathered}$ | Md | Om | C3 | 10+ | Heavy lichen and moss on bark | Remove |
| A | Holly Ilex aquifolium 'Silver Queen' | 4-6m | 2.5 m | 3.0 m | 2.0 m | 2.5 m | $\begin{gathered} \# \\ 150 \mathrm{~mm} \end{gathered}$ | Md | Sm | C1 | 20+ | Trimmed hedge-like with Bay Laurel at base | Remove |
| B | Leyland Cypress <br> X Cuprocyparis leylandii | 4-6m | 2.0m | 2.0 m | 3.0m | 2.0 m | $\#$ 150 mm | N | Sm | C1 | 20+ | Trimmed hedge-like at base | Remove |
| 0755 | Apple Malus spp. | 4-6m | 2.2 m | 3.0m | 3.2m | 2.0m | $\begin{gathered} \mathrm{M} / \mathrm{S} \\ 150 \& \\ 130 \mathrm{~mm} \end{gathered}$ | Md | Om | C3 | 10+ | Decay at main union | Remove |


| No. | Species | Ht | N | S | E | W | $\begin{gathered} \text { Dia } \\ \text { (DBH) } \end{gathered}$ | Vigour | Age <br> Class | Cond <br> Class | ERC | Comments | Priority <br> Action |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0756 | Pear Pyrus spp. | $8-10 \mathrm{~m}$ | 3.0m | 3.0m | 4.0m | 2.5 m | 233mm | L | M | C3 | 10+ | Kink in trunk at 1.6 m | Remove |
| 0757 | Walnut Juglans nigra | $\begin{gathered} 10- \\ 12 \mathrm{~m} \end{gathered}$ | 5.0 m | 5.0m | 5.2 m | 5.5m | $\begin{array}{\|c} \hline \text { M/S 350, } \\ 230,195, \\ 180 \& \\ 160 \mathrm{~mm} \end{array}$ | N | Sm | C3 | 10+ | The largest stem is a fusion of 2 stems now growing together, major decay at base, small Hen of the woods Grifola frondose fungal bracket at base | Remove |
| 0758 | Apple Malus spp. | 2-4m | 3.0 m | 4.0 m | 3.5 m | 4.0m | $\begin{gathered} \mathrm{M} / \mathrm{S} \\ 170 \mathrm{\&} \\ 160 \mathrm{~mm} \end{gathered}$ | N | M | C3 | 10+ | Crossing large branches, M/S at 500mm above GL, decay in smaller branches, heavily suppressed by Copper Beech to the south | Remove |
| 0759 | Purple Plum Prunus cerasifera 'Nigra' | 6-8m | 4.0 m | 2.0 m | 3.0m | 3.0m | $\begin{gathered} \text { M/S 190, } \\ 90 \& \\ 75 \mathrm{~mm} \end{gathered}$ | N | Sm | C3 | 20+ | Heavy lichen and moss on bark | Remove |
| 0760 | Copper Beech Fagus sylvatica 'Atropurpurea Group' | $\begin{aligned} & 20- \\ & 22 \mathrm{~m} \end{aligned}$ | 9.0 m | 7.0m | 9.0m | 10m | 910m | N | V | A3 | 40+ | Swelling in trunk north side 2 m above GL-possible indication of internal decay, co-dominant stems at 4 m , large bark inclusion (structural defect), small dead branch, 100mm dia at 10 m on east side | Retain, carry out root investigati on works |


| No. | Species | Ht | N | S | E | W | $\begin{gathered} \text { Dia } \\ \text { (DBH) } \end{gathered}$ | Vigour | Age Class | Cond <br> Class | ERC | Comments | Priority <br> Action |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0761 | Copper Beech <br> Fagus sylvatica <br> 'Atropurpurea Group' | $\begin{aligned} & 20- \\ & 22 m \end{aligned}$ | 6.0 m | 7.0m | 7.5 m | 11m | 990m | N | V | A3 | 40+ | Two large limbs removed from the east side-wounds $650 \times 500 \mathrm{~mm}$ (some occlusion) and $420 \times 400 \mathrm{~mm}$ (no occlusion) brown rot and fungal brackets on wounds, small swelling at base of wounds, minor bark decay at root buttress beneath wounds, smaller branch removal on north side, occluded $2 / 3$ of the way around, more smaller branches removed north side further up, good occlusion | Retain, carry out root investigati on works |

Hedgerow 01; Low box hedging is located within the garden area, it is approximately 400mm in height, well clipped at the time of survey, and suffers from box blight in places. This hedge will be retained in places and will be augmented with new box hedging to create a beautiful, designed effect. Some of the hedging will be removed.

Hedgerow 02: A dense mature Cotoneaster lacteus and Privet Ligustrum ovalifolium hedge, 2 - 3 m in height, is located within the garden area. This hedge is to be removed.

| Hedgerow 03: A dense Portuguese Laurel Prunus lusitanica hedge, $1-1.5 \mathrm{~m}$ in height is located on the eastern boundary, this is to be retained. |
| :--- |
| Tree line 01 is a line of mature Poplar Populus tremula trees located well away from the site, across New street. They are mature category B trees $14-16 \mathrm{~m}$ in height |
| and have been surveyed as line. The trees have a typical DBH of $400-500 \mathrm{~mm}$. They have an estimated remaining contribution of $20+$. |

